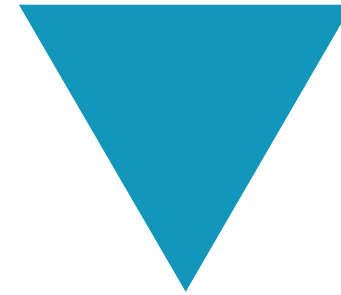
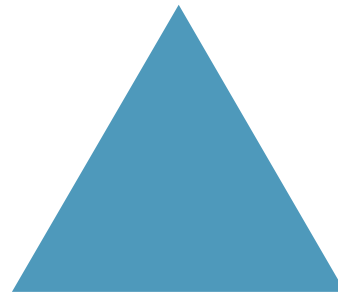
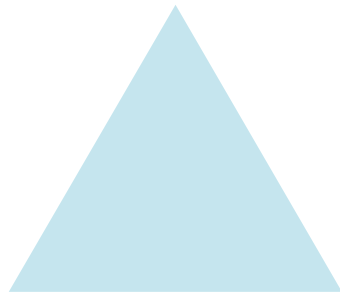


CASE STUDY BRIEF

MERCER MANUFACTURING



BUSINESS CONTEXT



- Mercer Manufacturing is a midsize Singaporean company that holds a solid position in its industry as an efficient, reliable, low-cost manufacturer of widgets used in consumer products. It operates a single manufacturing plant located in Changi North Industrial Estate.
- While the business is not under any particular cost pressures at present, the CEO foresees that this may become a future priority and wishes to continuously promote efficiency and effectiveness initiatives across the plant. Excluding direct material costs, the three largest expense items are labour, utilities (e.g. electricity and gas) and facilities maintenance (e.g. cleanroom upkeep).
- A current project is focused around the achievement of maximum capacity for Production Assemblers – which is defined as 80% labour effectiveness or 12 minutes production time per widget. Data provided by the business shows that after an employee passes certification (Employee Class is no longer ‘Probationary’), a Production Assembler will perform at 45% of their capacity. A Production Assembler can reach 96% of their capacity after 12 to 18 months on the production line. Every production line that achieves the capacity target is incentivised through a team-based bonus mechanism.
- The rate of employee attrition is making it difficult for the production lines to fulfil the capacity targets. Anecdotal evidence from the CEO suggests that two-thirds of new hires leave within the first 6 months and around half of the remaining new hires leave during the certification period (while still ‘Probationary’ employees). The direct cost of attrition, comprising recruitment and training expenses, amounts to \$10,000 per employee.
- Based on incremental headcount and replacement hire forecasts, the company is required to hire approximately 900 Production Assemblers over the next three years. In order to meet these figures, the CEO would like to understand and reduce employee attrition; which in turn is hypothesised to improve the line capacity.

CHALLENGE



The CEO has appointed you as a Consultant and posed the following questions:

1. Can we conduct a descriptive analysis of attrition trends over the past three years for Production Assemblers? I would like to understand if there are any patterns in the attrition data and whether or not any particular employee groups are more prone to attrition.
2. Can we predict the likelihood that a Production Assembler will leave Mercer Manufacturing in advance of the event, to allow the company sufficient time to intervene? I would like to prompt my Managers and alert them of high-risk individuals.
3. Generally speaking, what are the primary factors that are causing employees to leave? Could you recommend some broad policy or program actions that HR could take in order to reduce the likelihood of attrition.

Notes:

- You have been provided with an extract from Mercer Manufacturing's Human Resource Information System. You may use this data for your analysis along with any other information you deem relevant.
- Conduct your analysis based on the CEO's three points above and provide the output (including any code etc.).
- The CEO has scheduled a 30 minute slot for you to present your findings. Prepare a report/presentation that you will use for this discussion.



MERCER

MAKE TOMORROW, TODAY